

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Catherine M. Payne, et al.

Serial No.: To be Assigned; Divisional of

Art Unit: To be Assigned

Application Ser. No. 09/343,532

Filed: December 4, 2001

Examiner: To be Assigned

For: POST ETCH CLEANING COMPOSITION Attorney Docket No.:

FOR DUAL DAMASCENE SYSTEM

8317-123-999

PRELIMINARY AMENDMENT UNDER 37 C.F.R. § 1.115

Box Patent Application

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

In accordance with 37 C.F.R. §1.115, please consider and enter the following preliminary amendment and remarks. Applicant submits concurrently herewith: (a) marked up versions of all revised paragraphs of the specification, showing insertions and deletions, are attached hereto as Appendix A; (b) marked up versions of all revised claims, showing insertions and deletions, are attached hereto as Appendix B; (c) claims as pending upon entry of the preliminary amendment are attached hereto as Appendix C; (d) copy of parent application specification as filed; (e) a copy of the formal drawings as allowed; (f) Utility Patent Application Transmittal; (g) Information Disclosure Statement; and (h) PTO Form 1449 List of References Cited by Applicant. The Examiner is kindly referred to the file of the parent application, serial no. 09/343,532 for copies of the references cited.

AMENDMENTS

Amendments to the Specification

Marked up versions of all revised paragraphs, showing insertions and deletions, are included in Appendix A.

Replace the Title on page 1, lines 1-2, with the following text:

POST ETCH CLEANING COMPOSITION FOR DUAL DAMASCENE SYSTEM

Amendments to the Claims

Marked up versions of all revised claims, showing insertions and deletions, are included in Appendix B. A clean copy of all claims that will be pending upon entry of this Amendment is attached hereto as Appendix C.

Please rewrite Claim 1 as follows:

1. (Amended) A composition for removal of etch residues from integrated circuits using cooper materials, which comprises a choline compound, water and an organic solvent.

REMARKS

Applicant has amended the specification to reflect a more concise Title.

Applicant has amended the claims to more particularly recite and distinctly point out what they believe to be the invention.

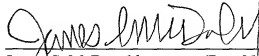
The above-made amendment does not introduce new matter and Applicant respectfully requests entry of the amendment and remarks made herein in the file of the above-identified application. The pending claims are believed to be in allowable form and Applicant requests that Examiner consider this application with a view toward allowance. The Examiner is invited to call the undersigned attorney if a telephone call could help Examiner's consideration of such claims.

CONCLUSION

Applicant estimates that no fee is due in connection with this Amendment because it is being submitted, under 37 C.F.R. § 1.115, concurrently with filing of the application. However, should the Patent Office determine otherwise, The Commissioner is hereby authorized to charge any fees associated with filing this Amendment to Pennie & Edmonds LLP Deposit Account No. 16-1150. A copy of this sheet is enclosed.

Respectfully submitted,

Date: December 4, 2001



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**APPENDIX A:
CHANGES TO SPECIFICATION UPON ENTRY
OF THE PRELIMINARY AMENDMENT UNDER 37 C.F.R. § 1.115
FILED DECEMBER 4, 2001**

**U.S. PATENT APPLICATION DIVISIONAL OF SERIAL NO. 09/343,532
(ATTORNEY DOCKET NO. 8317-123-999)**

The title beginning at page 1, lines 1-2 is revised as follows:

POST ETCH CLEANING COMPOSITION ~~AND PROCESS~~ FOR DUAL
DAMASCENE SYSTEM

**APPENDIX B:
CHANGES TO CLAIMS UPON ENTRY
OF THE PRELIMINARY AMENDMENT UNDER 37 C.F.R. § 1.115
FILED DECEMBER 4, 2001**

**U.S. PATENT APPLICATION DIVISIONAL OF SERIAL NO. 09/343,532
(ATTORNEY DOCKET NO. 8317-123-999)**

1. (Amended) A composition for removal of etch residues from integrated circuits using copper materials, which comprises a choline compound, water and an organic solvent.

**APPENDIX C:
CLAIMS AS PENDING UPON ENTRY
OF THE PRELIMINARY AMENDMENT UNDER 37 C.F.R. § 1.115
FILED DECEMBER 4, 2001**

**U.S. PATENT APPLICATION DIVISIONAL OF SERIAL NO. 09/343,532
(ATTORNEY DOCKET NO. 8317-123-999)**

1. (Amended) A composition for removal of etch residues from integrated circuits using copper materials, which comprises a choline compound, water and an organic solvent.

2. The composition of claim 1 in which the composition from about 10 percent by weight to about 50 percent by weight of the choline compound.

3. The composition of claim 2 in which the composition comprises from about 10 percent by weight to about 80 percent by weight of the water.

4. The composition of claim 3 in which the composition comprises from about 20 percent by weight to about 80 percent by weight of the organic solvent.

5. The composition of claim 1 in which the choline compound comprises choline hydroxide, choline bicarbonate or choline chloride.

6. The composition of claim 5 in which the choline compound is choline hydroxide.

7. The composition of claim 5 in which the organic solvent comprises propylene glycol, dimethyl sulfoxide, monoethanolamine, or diglycolamine.

8. The composition of claim 1 in which the composition additionally comprises hydroxylamine.

9. The composition of claim 1 in which the composition additionally comprises a corrosion inhibitor.